

SECTION 1 — Identification

Product Name	Sodium Chloride — Laboratory Grade
Catalogue No.	ASC-8051
CAS Number	7647-14-5
Molecular Formula	NaCl MW: 58.44 g/mol
Intended Use	Laboratory reagent for buffer preparation, culture media, electrophoresis, molecular biology, and general laboratory chemistry. For laboratory use only.
Supplier	AuSaMicS Pty Ltd ABN 56 676 640 467
Address	31 Longview CT, Thomastown VIC 3074, Australia
Phone / Email	+61 412 520 598 support@ausamics.com.au
Emergency	Poisons Information Centre: 13 11 26 (Australia, 24 hr)

SECTION 2 — Hazard Identification

GHS Classification	NOT classified as hazardous under Australian WHS Regulations 2023 / GHS 7th Edition at intended laboratory use concentrations.
Signal Word	None required
Hazard Pictograms	None applicable
Hazard Statements	None applicable
Precautionary Statements	P260: Do not breathe dust. P264: Wash hands after handling. P270: Do not eat, drink or smoke when using this product.
Other Hazards	Dust may cause mild respiratory and eye irritation in confined spaces. Not flammable, not explosive, not oxidising under normal conditions.

SECTION 3 — Composition / Ingredients

Component	CAS	Content	GHS Classification
Sodium Chloride (NaCl)	7647-14-5	>= 99.5%	Not classified as hazardous
Moisture	7732-18-5	<= 0.5%	Not hazardous

SECTION 4 — First Aid Measures

Route	First Aid Action
Inhalation	Remove to fresh air. If respiratory irritation persists, seek medical attention.
Skin Contact	Wash with soap and water. Remove contaminated clothing if prolonged contact. No specific treatment required.
Eye Contact	Flush immediately with copious water for 15 minutes. Seek medical attention if irritation persists.

Route	First Aid Action
Ingestion	NaCl is a normal dietary component — low acute toxicity. Rinse mouth; drink water. Large quantities (>3 g/kg body weight) may cause hypernatraemia — seek medical advice.

SECTION 5 — Fire-Fighting Measures

- Not flammable and not combustible under normal conditions.
- Non-combustible solid — will not burn.
- Use any extinguishing medium appropriate for surrounding fire conditions.
- No hazardous combustion products under normal conditions.

SECTION 6 — Accidental Release Measures

- Wear gloves and eye protection during clean-up.
- Avoid generating dust. Sweep or vacuum carefully. Collect in sealed containers for disposal.
- Rinse area with water after collection.
- No significant environmental hazard from minor spills. Large quantities: avoid bulk discharge to waterways (may affect aquatic salinity).

SECTION 7 — Handling and Storage

Handling:

- Handle in well-ventilated laboratory area. Avoid generating dust.
- Wear safety spectacles when handling powder in quantity.
- Do not eat, drink, or smoke in the handling area.
- Wash hands thoroughly after handling.

Storage:

- Store at 15-25°C in a tightly closed container away from moisture.
- NaCl is hygroscopic — reseal container immediately after each use.
- Keep from strong oxidising agents.
- Shelf life: Indefinite under proper dry storage conditions.

SECTION 8 — Exposure Controls / PPE

Protection Type	Recommendation
Respiratory	P1 filter mask when handling bulk powder or in dusty conditions
Hand Protection	Nitrile or latex gloves for prolonged skin contact
Eye / Face Protection	Safety spectacles when handling dry powder
Body Protection	Standard laboratory attire. Closed-toe shoes.
Engineering Controls	Good general laboratory ventilation sufficient for normal use quantities
OEL (Sodium Chloride)	No specific Australian WES established. Apply general inhalable dust limit: 10 mg/m ³ (inhalable); 3 mg/m ³ (respirable).

SECTION 9 — Physical and Chemical Properties

Property	Value
Physical Form	Crystalline powder or granules
Colour	White
Odour	Odourless
pH (5% aq. solution, 25°C)	6.7 – 7.3
Melting Point	801 degrees C
Boiling Point	1,465 degrees C
Density	2.165 g/cm ³
Solubility in Water	357 g/L at 20 degrees C
Flammability	Not flammable
Explosive Properties	Not explosive
Vapour Pressure	Negligible at room temperature

SECTION 10 — Stability and Reactivity

- Chemically stable under recommended storage conditions.
- Conditions to avoid: Excessive moisture (causes caking); strong oxidising agents.
- Incompatible materials: Strong oxidising agents (e.g. concentrated sulfuric acid + NaCl can form HCl gas — avoid contact). Reactive metals (sodium, potassium) in anhydrous conditions.
- Hazardous decomposition products: None under normal conditions. At very high temperatures (>1,000°C): sodium oxide vapours and chlorine gas possible.

SECTION 11 — Toxicological Information

Endpoint	Data
Acute oral toxicity	LD50 (rat, oral): 3,000 mg/kg. Low acute oral toxicity — NaCl is a normal dietary component.
Acute dermal toxicity	Not a significant dermal hazard at normal use concentrations.
Eye / Skin irritation	Mild irritant at high concentrations. Dust may cause mild mechanical irritation.
Carcinogenicity	Not classified as carcinogenic. No evidence of carcinogenicity.
Mutagenicity	Not classified as mutagenic. No evidence of genotoxicity.
Reproductive toxicity	Not classified as a reproductive hazard.

SECTION 12 — Ecological Information

- NaCl is a natural component of the environment (marine, estuarine, and brackish water ecosystems).
- Low acute ecotoxicity at normal use concentrations.
- Large-scale discharge to freshwater systems may affect salinity and aquatic organisms. Avoid bulk disposal to waterways or soil.

SECTION 13 — Disposal Considerations

- Dilute aqueous solutions: Dispose to drain with large volumes of water per local EPA regulations.
- Solid waste: Dispose as non-hazardous solid waste per local EPA regulations.
- Do not dispose of large quantities to natural waterways.

SECTION 14 — Transport Information

System	Status
ADG (Australia)	Not classified as dangerous goods
IATA (Air)	Not classified as dangerous goods
IMDG (Sea)	Not classified as dangerous goods
UN Number	Not applicable
Special Precautions	Store upright. Protect from moisture during transport.

SECTION 15 — Regulatory Information

- Australian WHS Regulations 2023 / GHS 7th Edition — not classified as hazardous.
- AICIS (Australian Industrial Chemicals Introduction Scheme) — compliant.
- HS / AHECC Code: 2849.10.00.
- For laboratory use only — not a registered food additive or therapeutic good in this supply context.

SECTION 16 — Other Information

SDS Reference	SDS-ASC-8051-NaCl
Issue Date	January 2026
Next Review Date	January 2028
Prepared by	Hassan Salimi — Founder & Technical Director, AuSaMicS Pty Ltd

DISCLAIMER: This Safety Data Sheet has been prepared in accordance with Australian WHS Regulations 2023 and GHS 7th Edition. Information is believed accurate at the issue date. AuSaMicS Pty Ltd accepts no liability for errors or omissions. Users must verify suitability for their specific application. This SDS supersedes all previous versions.